



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,994	11/09/2001	Peter J. Janssen	PHUS010506	1293
24737	7590	07/14/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			DUONG, THOI V	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,994

Applicant(s)

JANSSEN, PETER J.

Examiner

Thoi V Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance: See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 30, 2004 has been entered.

Accordingly, claims 3-8 were amended, and claims 1, 2 and 9-13 were cancelled. Currently, claims 3-8 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claims 3-8 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "said intermediate layer is oriented in the same plane as said LC bulk material" recited in the claim is not disclosed in the specification. The specification only discloses that the orientation profile of the LC director inside this intermediate layer can be perpendicular to the substrate at the light incident side and

Art Unit: 2871

gradually transition to parallel at the light existing side (page 6, lines 2-7). Claims 4-8 are also rejected since they are dependent on the rejected claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatano et al. (USPN 6,320,629 B1) in view of Kuzuhara et al. (US 2004/0080693 A1).

Re claim 3, as shown in Fig. 12, Hatano et al. discloses an LCD system capable of fast mode operation with high contrast, said system comprising:

a) a source of polarized lights (col. 10, line 55 to col. 11, line 23) ;

b) an LC cell 600 having a surface upon which said light is incident, wherein said cell includes LC material 621 (Applicant's LC bulk material) contained between and adjoining an upper and a lower glass substrate 602 and 601, said upper substrate 602 having said surface; and

c) an optically anisotropic intermediate layer 618 interposed between said upper substrate and said LC material (col. 27, lines 48-53),

wherein, re claims 4 and 5, said optically anisotropic intermediate layer is a photopolymerizable liquid crystal material (LC polymer) having a predetermined director profile (col. 27, lines 24-30 and col. 10, lines 12-26).

Hatano et al. discloses a LCD system that is basically the same as that recited in

Art Unit: 2871

claim 1 except that the intermediate layer is not oriented in the same plane as said LC bulk material.

As shown in Fig. 6, Kuzuhara et al. discloses an optically anisotropic layer 23 having an orientation direction 24 in the same plane as an orientation direction 28 of liquid crystal material 27 (page 31, paragraphs 423 and 424).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the LCD system of Hatano et al. with the teaching of Kuzuhara et al. by forming an optically anisotropic layer being oriented in the same plane as said LC bulk material so as to improve viewing angle characteristics (page 2, paragraph 17).

Re claims 6-8, as to the product-by-process limitation "wherein said optically anisotropic intermediate layer is evaporated obliquely between said upper and lower glass substrates" recited in claim 6, "wherein said optically anisotropic intermediate layer is etched by an oblique particle beam" recited in claim 7, and "wherein said optically anisotropic intermediate layer is milled" recited in claim 8, it has been recognized that "Even through product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process". *In re Thorpe*, 227 USPQ 964,966 (Fed. Cir. 1985). See also MPEP 2113.

Art Unit: 2871

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (571) 272-2293.

Thoi Duong
07/07/2004



TARIFUR R. CHOWDHURY
PRIMARY EXAMINER